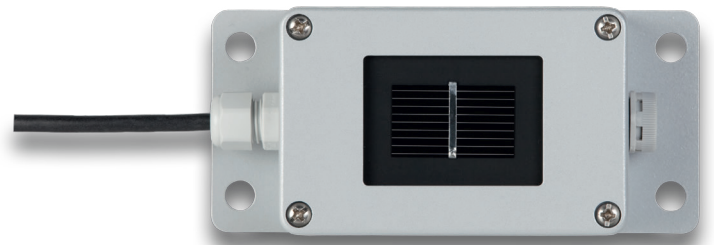


# TEMPERATURE AND IRRADIATION SENSOR

More data – better quality  
information

- Precise measurement
- Full yield control
- Sturdy and weatherproof



Measure your PV system's performance. The external temperature and irradiation sensor accurately captures the two ambient parameters, which together have an impact on the current performance of a PV system: temperature and light intensity.

It is compatible with all REFU<sup>sol</sup> inverters. The device's active temperature compensation function increases its measuring accuracy. The extended measurement range of up to 1300 W/m<sup>2</sup>, the individual calibration to the standard measurement signal and the possibility of measuring module temperature make the sensor a powerful data collection tool. The inverter integrated data-logger records the temperature and irradiation values and communicates them to the REFUlog monitoring portal.

These additional values allow you to display the operating conditions of your PV system even more accurately and to identify system errors more quickly. In REFUlog, this data provides information on the performance.

Art. No.

**SIS-13TC-T  
922009**

**GENERAL DATA**

Shunt-resistance ( $\Omega$ )	0.27 (TK = 20 ppm / K)
Ambient temperature ( $^{\circ}\text{C}$ )	-35 ... +80
Supply voltage (VDC)	12 ... 28
Connecting cable	4 x 0.14 mm <sup>2</sup> , 3 m (UV-resistant)
Cell dimension (mm)	20 x 34
Dimensions W x H x D (mm)	138 x 64 x 40
Weight (g)	440

**SOLAR IRRADIATION**

Measurement range (W/m <sup>2</sup> )	0 ... 1,300
Output signal (V)	0 ... 10
Measuring uncertainty (%)	+/- 3.5 of measurement value

**MODULE TEMPERATURE**

Measuring range ( $^{\circ}\text{C}$ )	-26.1 ... +89
Output signal (V)	0 ... 10
Measuring uncertainty (K)	2.5
Nonlinearity (%)	+/- 0.1

**TERMINAL ASSIGNMENT**

Orange	Irradiation output signal (0 ... 10 V)
Red	Supply voltage (12 ... 28 VDC)
Black	GND
Brown	Temperature output signal (0 ... 10 V)